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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,634	04/14/2004	Shinya Inagaki	826.1633D	4656

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WASHINGTON, DC 20005

EXAMINER
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DOAN, JENNIFER

ART UNIT	PAPER NUMBER
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2874

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/823,634

Applicant(s)

INAGAKI ET AL.

Examiner

Jennifer Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 92-105 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 100-105 is/are allowed.
- 6) ☒ Claim(s) 92-96, 98 and 99 is/are rejected.
- 7) ☒ Claim(s) 97 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's communication filed on October 19, 2006, has been carefully studied by the Examiner. The arguments advanced therein are persuasive. However, in view of further study, a relevant document is found applicable; therefore, a previous office action is withdrawn and a new rejection is set forth below. This action is **not** made final.

#### ***Specification***

1. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 92, 96 and 98 are rejected under 35 U.S.C. 102(a) as being anticipated by Ishikawa (JP 11-088260).

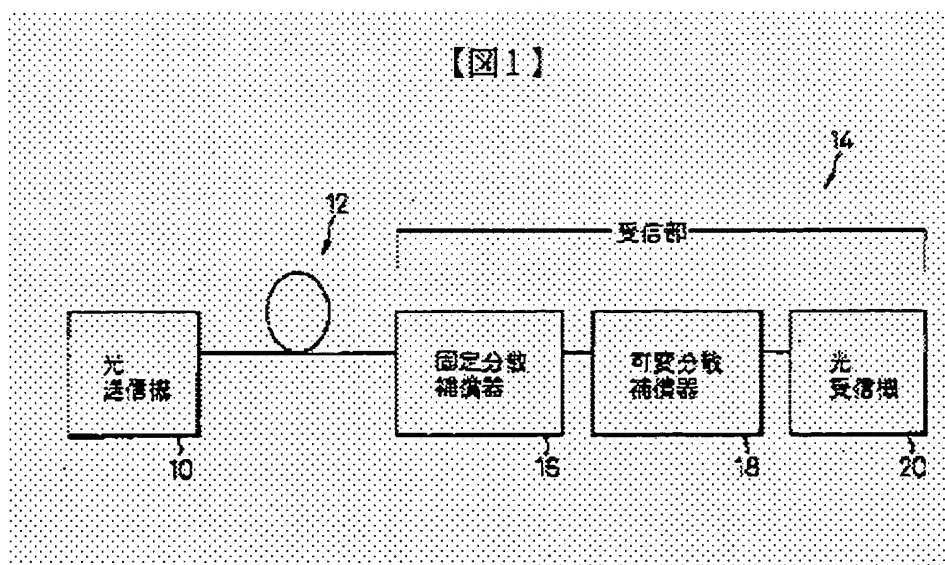
With respect to claim 92, Ishikawa (Fig. 1) discloses an apparatus comprising a first compensator (16) compensating wavelength dispersion, the first compensator having a constant wavelength dispersion characteristic over a plurality of wavelengths (see the abstract); and a second compensator (18) compensating wavelength dispersion after wavelength dispersion is compensated by the first compensator (16),

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wherein the first and second compensators together compensate for wavelength dispersion dependent on a respective wavelength of a transmission line (see figure 1).

With respect to claim 96, Ishikawa (Fig. 1) discloses an apparatus, wherein the respective wavelength is the wavelength of a respective signal light included in a wavelength division multiplexed (WDM) light transmitted through the transmission line and including a plurality of signal lights at different wavelength multiplexed together (see figure 1).

With respect to claim 98, Ishikawa (Fig. 1) discloses an apparatus comprising first means (16) compensating wavelength dispersion, the first means having a constant wavelength dispersion characteristic over a plurality of wavelengths (see the abstract); and second means (18) compensating wavelength dispersion after wavelength dispersion is compensated by the first means (16), wherein the first and second means together compensate for wavelength dispersion dependent on a respective wavelength of a transmission line (see figure 1).



***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 93 and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa (as cited above) in view of Yoshimura (U.S. Patent 5,793,917, as cited in the previous office action).

With respect to claims 93 and 99, Ishikawa substantially discloses all the limitations of the claimed invention except for a housing, which houses, and thereby encloses, both the first and second compensators. However, Yoshimura (figure 3) discloses a housing (1), which houses the compensators for protection. Therefore, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Ishikawa with a housing to enclose the compensating device (accordance with the teaching of Yoshimura) for the purpose of obtaining more protection for the optical device.

7. Claims 94 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa (as cited above) in view of Bergmann et al. (U.S. Patent 6,253,005, as cited in the previous office action).

With respect to claims 94 and 95, Ishikawa substantially discloses all the limitations of the claimed invention except for a substrate on which both the first and second compensators are fixed. However, Bergmann et al. (figures 6 and 7) disclose a substrate on which the compensators (36) are fixed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Ishikawa with a substrate to fixedly hold the compensating device (accordance with the teaching of Bergmann et al.) for the purpose of obtaining more protection for the optical device.

***Allowable Subject Matter***

8. Claim 97 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or reasonably suggest an apparatus, wherein the first compensator is a virtually imaged phased array (VIPA) dispersion compensator.

9. Claims 100-105 are allowed.

The prior art fails to disclose or reasonably suggest an apparatus comprising a first compensator compensating for wavelength dispersion, the first compensator having a constant wavelength dispersion characteristic over a plurality of wavelengths; and a second compensator compensating for dispersion slope over the plurality of wavelengths after the compensation by the first compensator.

Claims 101-105 depend from claim 100.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 92-105 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone


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number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

January 3, 2007

  
JENNIFER DOAN  
PRIMARY EXAMINER